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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,569

04/18/2005

Tao Zhang

11005.0065-00000

1394

22852 7590 02/18/2010
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EXAMINER

SHIFERAW, ELENI A

ART UNIT

PAPER NUMBER

2436

MAIL DATE

DELIVERY MODE

02/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,569	Applicant(s) ZHANG ET AL.	
	Examiner ELENI A. SHIFERAW	Art Unit 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The objection to the IDS's submitted on 05/13/2009 is fully considered and an initialized copy previously attached.
2. Claims 1-5 and 7-10 are pending.
3. **The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6987781 B1 and US 20030193696 A1.**

Response to Arguments

6. Applicant's arguments filed 05/13/2009 have been fully considered but are not persuasive.
4. The 101 rejection is withdrawn in view of applicant's argument.

Regarding argument "a *prima facie* case of obviousness has not been established because the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the claimed invention and the prior art. Accordingly, the burden thus remains with the Examiner, as the Office Action has failed to clearly articulate a reason why the prior art would have rendered the claimed invention obvious to one of ordinary skill in the art," argument is not persuasive because the office has properly determined the scope, content of the prior art, properly ascertained the differences between the claimed invention and the prior art and addressed each and every limitation reasonably in light of applicant's disclosure. Sufficient and clear articulated reason

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why the prior art would have been rendered the claimed invention obvious to one of ordinary skill in the art has been provided.

Regarding argument:

"Claim 1 recites a combination including "configuring a Media Gateway (MG) with an authentication key and setting a security data package on a network protocol, by a Media Gateway Controller (MGC)." That is, claim 1 requires configuring an authentication key and setting a security data package, on a MG. At page 6 of the Office Action, the Examiner acknowledges that Floryanzia and Borella fail to disclose this element. Indeed, these references do not provide any teaching or suggestion of this element." Remark page 6 par. 2.

Argument is not persuasive what the office action discloses at page 6 of the office action is "The combination fails explicitly disclose configuring step before initiating an authenticating request as argued by the applicant" but not "configuring a Media Gateway (MG) with an authentication key and setting a security data package on a network protocol, by a Media Gateway Controller (MGC)," as applicant contends. It looks like the applicant is attacking the references individually, and in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner has clearly explained in the office action that **Floryanzia (on column 3, lines 54-67) teaches a Gateway sending an Access Token in all Registration Request messages. The Access Token contains information that authenticates the Gateway to the Gatekeeper. The Gatekeeper formats a message to an authentication server that will authenticate the information contained in**

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the token, and the server responds with either an Access-Accept or Access-Reject message and also see col. 2 lines 49-60; ITU-T Recommendation H.235 of February, 1998 describes security and encryption for H-series multimedia terminals, including H.323 and other H.245-based terminals. Section 10.3.3 of H.235 specifies that data structures carrying encrypted information, called "cryptoTokens," can be used to allow endpoints to authenticate themselves to one another..... Floryanzia on (column 4, lines 23-31) further discloses receiving non-encrypted authentication request information comprises the steps of *receiving an access token comprising a general identifier value, a time stamp value, a challenge value, and a random value*. In a related feature, the step of receiving non-encrypted authentication request information comprises the steps of receiving an H.235 ClearToken comprising a general identifier value, a time stamp value, a challenge value, and a random value. ITU reference discloses "configuring step before initiating an authenticating request" (see section A.3), the MGC and gateway are exchanged information i.e. the MGC sending a commands/configuration like create connection, modify connection, delete connection and notification request. On section A.3.2.2 command parameter values are configured before time delay or MWD, or restart delay or transit time is calculated (see for e.g. section A.3.5, page 22, page 27, page 31). See further section A 3.2.2.4 for authentication after command parameter values configuration.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. Therefore, the examiner asserts that the system of the prior art teach or suggest the subject matter as recited in independent claims. Dependent claims are also rejected at least by virtue of their

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dependency on independent claims and by other reason set forth in this office action dated 08/21/2009. Accordingly, rejections for all pending claims are respectfully maintained.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 4, 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6961857 (Floryanzia) in view of Borella et al. 6353891 B1. and further in view of “INTERNATIONAL TELECOMMUNICATION UNION, Series J: Cable Networks and Transmission of Television, Sound Programme and Other Multimedia Signals – IP Cablecom Trunking Gateway Control Protocol (TGCP), February 2002, J.171” herein after (ITU).**

As to claims 1, 7 and 9, Floryanzia discloses an authentication method/system for network security, comprising the following configuring a Media Gateway (MG) with an authentication key, and setting a security data package on a network protocol, by a Media Gateway Controller (MGC) (Floryanzia column 3, lines 54-67; a Gateway sends an Access Token in all Registration Request messages. The Access Token contains information that

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authenticates the Gateway to the Gatekeeper. The Gatekeeper formats a message to an authentication server that will authenticate the information contained in the token, and the server responds with either an Access-Accept or Access-Reject message and also see col. 2 lines 49-60; ITU-T Recommendation H.235 of February, 1998 describes security and encryption for H-series multimedia terminals, including H.323 and other H.245-based terminals. Section 10.3.3 of H.235 specifies that data structures carrying encrypted information, called "cryptoTokens," can be used to allow endpoints to authenticate themselves to one another....);

during a security authentication, by the MGC, sending security authentication request containing a security authentication parameter to the MG using the data package **(Floryanzia column 4, lines 23-31; receiving non-encrypted authentication request information comprises the steps of *receiving an access token comprising a general identifier value, a time stamp value, a challenge value, and a random value.* In a related feature, the step of receiving non-encrypted authentication request information comprises the steps of receiving an H.235 ClearToken comprising a general identifier value, a time stamp value, a challenge value, and a random value);**

performing an encryption calculation according to the security parameter and the authentication key and reporting a calculation result to the MGC, by the MG, (Floryanzia column 10, lines 1-43; **an encryption calculation is performed according to the security parameter and the authentication key and/or generating CHAP protocol response using the alias, password, and the CHAP Challenge values that the authentication server has received from the Gatekeeper in the Access Request packet. In one specific embodiment,**

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the response is computed as: Response=[CHAP ID+User Password+CHAP Challenge]MD5 Hash and the Gatekeeper responds to the Gateway with a Registration Confirm (RCF) message); and

determining whether the MG is legal by computing the calculation result with a result calculated by the MGC (Floryanzia column 10, lines 1-43; **it is also determined whether the response it has generated matches attributes of the Access Token. The determination is carried out by determining whether the Response matches a Challenge that is computed from the Access Request message attributes as follows: Challenge=[Random value+Gateway User Password+Time Stamp value]MD5 Hash. If the computed Response matches the computed Challenge, based on the values received from the Gatekeeper, then sending an Access Accept packet to the Gatekeeper. If the computed Response does not match the computed Challenge, or the alias of the requesting Gateway is not in a database of the authentication server, sending an Access Reject packet back to the Gatekeeper.... and the Gatekeeper responds to the Gateway with a Registration Confirm (RCF) message).**

Floryanzia fails to disclose the determining step by the MGC by computing the calculation result with the result calculated by the MGC.

However Borella et al. discloses determining by the MGC whether the MG is legal by computing the calculation result with a result calculated by the MG (see fig. 3 and 5; wherein **only two devices RSIP host and RSIP gateway are both used to calculate a calculated result based on a received parameters and determine legality).**

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Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the teachings of Borella et al. within the system of Floryanzia because they are analogous in hash authentication and access controlling and determination. One would have been motivated to incorporate the teachings to generate authentication locally and enhance security.

The combination fails explicitly disclose configuring step before initiating an authenticating request as argued by the applicant. However reference ITU discloses configuring step before initiating an authenticating request (see section A. 3).

Therefore it would have been obvious to one having ordinary skill at the time of the invention was made to well-known include the configuring step before authenticating because to authenticate the system must be configured first.

As to claims 4, 8 and 10, Floryanzia discloses the authentication method/system for network security, wherein said data package comprises a security authentication request signal and a security authentication completion event, said security authentication request signal comprises a security authentication parameter, and said security authentication completion event comprises a security authentication result parameter (Floryanzia column 8, lines 5-34) and wherein the step of reporting a calculation result includes reporting by MG the calculation result to the MGC via a security authentication completion event in a data package (see fig. 3C element 332 and 336 and column 3, lines 54-67).

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As to claim 5, (Currently Amended) Floryanzia discloses the authentication method for network security according to claim 4, wherein the security authentication parameter is a random number (see col. 4 lines 23-31 and col. 10 lines 1-42; random value)

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6961857 (Floryanzia), Borella et al. 6353891 B1 and “INTERNATIONAL TELECOMMUNICATION UNION, Series J: Cable Networks and Transmission of Television, Sound Programme and Other Multimedia Signals – IPCablecom Trunking Gateway Control Protocol (TGCP), February 2002, J.171” *herein after (ITU)* and further in view of US 20020120760 (Kimchi).

As to claim 2, (Original) Floryanzia, Borella et al. and ITU teach the authentication method for network security according to claim 1. The combination fail to teach wherein said network protocol is Media Gateway Control Protocol (MGCP).

However, Kimchi discloses wherein said network protocol is Media Gateway Control Protocol (MGCP) (Kimchi paragraph 0036, lines 1-17).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention that the MGCP is one of the proposed upgrades for the older H. 323 standard (Kimchi paragraph 0036, lines 1-17).

As to claim 3, (Original) the combination teach the authentication method for network security according to claim 1. The combination fail to teach wherein said network protocol is H248 protocol.

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However, Kimchi discloses wherein said network protocol is H248 protocol (Kimchi paragraph 0036, lines 1-17).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention that the H248 is another proposed upgrade for the older H. 323 standard (Kimchi paragraph 0036, lines 1-17).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELENi A. SHIFERAW whose telephone number is (571)272-3867. The examiner can normally be reached on Mon-Fri 6:00am-2:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser R. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eleni A Shiferaw/
Primary Examiner, Art Unit 2436